

Excerpts from the California Government Code Pertaining to Hydrostatic Testing

§51013.5 Required Testing

- (a) Every newly constructed pipeline, existing pipeline, or part of a pipeline system that has been relocated or replaced, and every pipeline that transports a hazardous liquid substance or highly volatile liquid substance, shall be tested in accordance with Subpart E (commencing with Section 195.300) of Part 195 of Title 49 or the Code of Federal Regulations.
- (b) *NA*
- (c) *NA*
- (d) Every pipeline over 10 years of age and provided with effective cathodic protection shall be hydrostatically tested every five years, except for those on the State Fire Marshal's list of higher risk pipelines which shall be hydrostatically tested every two years.
- (e) Piping within a refined products bulk loading facility served by pipeline shall be tested hydrostatically at 125 percent of maximum allowable operating pressure utilizing the product ordinarily transported in that pipeline if that piping is operated at a stress level of 20 percent or less of the specified minimum yield strength of the pipe. The frequency for pressure testing these pipelines shall be every five years for those pipelines with effective cathodic protection and every three years for those pipelines without effective cathodic protection. If that piping is observable, visual inspection may be the method of testing.
- (f) Beginning on July 1, 1990, and continuing until the regulations adopted by the State Fire Marshal pursuant to subdivision (g) take effect, each pipeline within the State Fire Marshal's jurisdiction which satisfies any of the following sets of criteria shall be placed on the State Fire Marshal's list of higher risk pipelines until five years pass without a reportable leak due to corrosion or defect on that pipeline. Initially, pipelines on that list shall be tested by the next scheduled test date, or within two years of being placed on the list, whichever is first. On July 1, 1990, pipeline operators shall provide the State Fire Marshal with a list of all their pipelines which satisfy the criteria in this subdivision as of July 1, 1990. If any pipeline become eligible for the list of higher risk pipelines after that date, the pipeline company shall report that fact the State Fire Marshal within 30 days, and the pipeline shall be placed on the list retroactively to the date on which it became eligible for listing. Pipelines which are found to belong on the list, but are not so reported by the operator to the State Fire Marshal, shall be placed on the list retroactively. Operators failing to properly report their pipelines shall be subject to penalties under Section 51018.6. . Pipelines not covered under the risk criteria developed pursuant to subdivision (g) shall be deleted from the list when regulations are adopted pursuant to that subdivision. For purposes of this subdivision, a leak which is traceable to an external force, but for which corrosion

is partly responsible, shall be deemed caused by corrosion, "defect" refers to manufacturing or construction defects, and "leak" or "reportable leak" means a rupture required to be reported pursuant to Section 51018. As long as all pipelines are tested in their entirety at least as frequently as standard risk pipelines under subdivisions (c) and (d), it shall suffice for additional tests on higher risk pipelines to cover 20 pipeline miles in all directions along an operator's pipeline from the position of the leak or leaks which led to the inclusion or retention of that pipeline on the higher risk list. The interim list shall include pipelines which meet any of the following criteria:

- (1) Have suffered two or more reportable leaks, not including leaks during a certified hydrostatic pressure test, due to corrosion or defect in the prior three years;
 - (2) Have suffered three or more reportable leaks, not including leaks during a certified hydrostatic pressure test, due to corrosion, defects, or external forces, but not all due to external forces, in the prior three years;
 - (3) Have suffered a reportable leak, except during a certified hydrostatic pressure test, due to corrosion or defect of more than 50,000 gallons, or 10,000 gallons in a standard metropolitan statistical area, in the prior three years; or have suffered a leak due to corrosion or defect which the State Fire Marshal finds has resulted in more than 42 gallons of a hazardous liquid within the State Fire Marshal's jurisdiction entering a waterway in the prior three years; or have suffered a reportable leak of a hazardous liquid with a flashpoint of less than 140 degrees Fahrenheit, or 60 degrees centigrade, in the prior three years.
 - (4) Are less than 50 miles long, and have experienced a reportable leak, except during a certified hydrostatic pressure test, due to corrosion or a defect in the prior three years. For the purposes of this paragraph, the length of a pipeline with more than two termini shall be the longest distance between two termini along the pipeline.
 - (5) Have experienced a reportable leak in the prior five years due to corrosion or defect, except during a certified hydrostatic pressure test, on a section of pipe more than 50 years old. For pipelines which fall in this category, and no other category of higher risk pipeline, additional tests required by this subdivision shall be required only on segments of the pipe more than 50 years old as long as all pipe more than 50 years old which is within 20 pipeline miles from the leak in all directions along an operator's pipeline is tested.
- (g) The State Fire Marshal shall study indicators and precursors of serious pipeline accidents, and, in consultation with the Pipeline Safety Advisory Committee, shall develop criteria for identifying which hazardous liquid pipelines pose the greatest risk to people and the environment due to the likelihood of, and likely seriousness of, an accident due to corrosion or defect. The study shall give due consideration

to research done by the industry, the federal government, academia, and to any other information which the State Fire Marshal shall deem relevant, including, but not limited to, recent leak history, pipeline location, and material transported. Beginning January 1, 1992, using the criteria identified in that study, the State Fire Marshal shall maintain a list of higher risk pipelines, which exceed a standard of risk to be determined by the State Fire Marshal, and which shall be tested as required in subdivisions (c) and (d) as long as they remain on the list. By January 1, 1992, after public hearings, the State Fire Marshal shall adopt regulations to implement this subdivision.

- (h) In addition to the requirements of subdivisions (a) to (e) inclusive, the State Fire Marshal may require any pipeline subject to this chapter to be subjected to a pressure test, or any other test or inspection, at any time, in the interest of public safety.
- (i) Test methods other than the hydrostatic tests required by subdivisions (b), (c) (d) and (e), including inspection by instrumented internal inspection devices, may be approved by the State Fire Marshal on an individual basis. If the State Fire Marshal approves an alternative to a pressure test in an individual case, the State Fire Marshal may require that the alternative test be given more frequently than the testing frequencies specified in subdivisions (b), (c) (d) and (e).
- (j) The State Fire Marshal shall adopt regulations before January 1, 1992, to establish what the State Fire Marshal deems to be an appropriate frequency for tests and inspections, including instrumented internal inspections, which, when permitted as a substitute for tests required under subdivisions (b), (c) and (d) do not damage pipelines or require them to be shut down for the testing period. That testing shall in no event be less frequent than is required by subdivisions (b), (c) and (d). Each time one of these tests is required on a pipeline, it shall be approved on the same individual basis as under subdivision (i). If it is not approved, a hydrostatic test shall be carried out at the time the alternative test would have been carried out, and subsequent tests shall be carried out in accordance with the time intervals prescribed by subdivision (b), (c) or (d), as applicable.

§51014 Testing procedure pursuant to Section 51013.5; Test pressure

- (a) The pressure tests required by subdivisions (b), (c) and (d) of Section 51013.5 shall be conducted in accordance with Subpart E (commencing with Section 195.300) of Part 195 of Title 49 of the Code of Federal Regulations, except that an additional four-hour leak test, as specified in subsection (c) of Section 195.302 of Title 49 of the Code of Federal Regulations, shall not be required under subdivisions (b), (c) and (d) of Section 51013.5. The State Fire Marshal may authorize the use of liquid petroleum having a flashpoint over 140 degrees Fahrenheit or 60 degrees centigrade as the test medium. The State Fire Marshal shall make these authorizations in writing. Pressure tests performed under subdivisions (b), (c) and (d) of Section 51013.5 shall not show an hourly change for each section of the pipeline under test at the time in excess of either 10 gallons or the sum of one gallon and an amount computed at a rate in gallons per

mile equivalent to one-tenth of the nominal internal diameter of the pipe in inches.

- (b) Test pressure shall be at least 125 percent of the actual pipeline operating pressure.

§51014.3 Notice to State Fire Marshal prior to hydrostatic test

- (a) Each pipeline operator shall notify the State Fire Marshal and the local fire department having fire suppression responsibilities at least three working days prior to conducting a hydrostatic test which is required by this chapter. The notification shall include all of the following information:
 - (1) The name, address and telephone number of the pipeline operator.
 - (2) The specific location of the pipeline section to be tested and the location of the test equipment.
 - (3) The date and time the test is to be conducted.
 - (4) An invitation and a telephone number for local fire departments to call for further information on what they should do in event of a leak during testing.
 - (5) The test medium
 - (6) The name and telephone number of the independent testing firm or person responsible for certification of the test results.
- (b) The State Fire Marshal may observe tests conducted pursuant to this chapter.

§51014.5 Certification and submission of test results

- (a) When hydrostatic testing is required by Section 51013.5, the test results shall be certified by an independent testing firm or person who is selected from a list, provided by the State Fire Marshal, of independent testing firms or persons approved annually by the State Fire Marshal. The State Fire Marshal may charge a fee for consideration and approval of an independent testing firm or person pursuant to this subdivision, not to exceed the reasonable costs of that consideration and approval.
- (b) The results of the tests required by Section 51013.5 shall be submitted by the independent testing firm or persons within 30 days after completion of the test to the State Fire Marshal, who may review the results. The report shall show all of the following information:
 - (1) The date of the test
 - (2) A description of the pipeline tested including a map of suitable scale showing the route of the pipeline.

- (3) The results of the test
 - (4) Any other test information that may be specifically requested by the State Fire Marshal.
- (c) The State Fire Marshal shall not supervise, control or otherwise direct the testing.

Excerpts from Title 19 California Code of Regulations Concerning Hydrostatic Testing

§2040. Fees In order to implement Chapter 5.5 of the Government Code, California Pipeline Safety Act of 1981, the following fees will be assessed on a fiscal year basis:

(a) Intrastate Pipelines

- (1) Pipeline operator\$3,000
- (2) Charge per mile of pipeline operated\$150
- (3) Independent Hydrostatic Testing Firm\$1,500

(b) Interstate Pipelines

- (1) Pipeline Operator \$3,000
- (2) Charge per mile of pipeline operated \$100